

Title (en)
PROGRAMMING APPARATUS AND METHOD FOR REPAIRING CACHE ARRAYS IN MULTI-CORE MICROPROCESSOR

Title (de)
PROGRAMMIERVORRICHTUNG UND VERFAHREN ZUR REPARATUR VON CACHEANORDNUNGEN IN EINEM MEHRADRIGEN MIKROPROZESSOR

Title (fr)
APPAREIL DE PROGRAMMATION ET PROCÉDÉ DE RÉTABLISSEMENT DE MATRICES DE MÉMOIRES CACHES DANS UN MICROPROCESSEUR À COEURS MULTIPLES

Publication
EP 2989553 A1 20160302 (EN)

Application
EP 14891596 A 20141212

Priority
• US 201414285412 A 20140522
• IB 2014003185 W 20141212

Abstract (en)
[origin: WO2015177592A1] An apparatus includes a programmer, a stores, and a plurality of cores. The programmer programs a fuse array with compressed configuration data. The stores provides for storage and access of decompressed configuration data sets. Each of a plurality of cores is coupled to the fuse array. One of the cores is accesses the fuse array upon power-up/reset to decompress and store decompressed configuration data sets for one or more cache memories. Each of the cores includes reset logic and sleep logic. The reset logic employs the decompressed configuration data sets to initialize the one or more cache memories upon power- up/reset. The sleep logic determines that power is restored following a power gating event, and subsequently accesses the stores to retrieve and employ the decompressed configuration data sets to initialize the one or more caches following the power gating event.

IPC 8 full level
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CPC (source: EP US)
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